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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,707	12/08/2003	Toyoshi Umebayashi	ZUIKP0110US	4012

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EXAMINER

MCNALLY, DANIEL

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/730,707	Applicant(s) UMEBAYASHI ET AL.	
	Examiner Daniel McNally	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3 papers</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for Producing a Pants-type Diaper.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Vliet [US-4297157].

Van Vliet discloses a process for producing an article as broadly recited in claims 1-4. With regard to claim 1, Van Vliet describes an impervious film (30) or “first web” drawn from a supply roll (32) and bonded to elastics units (26) (column 4, lines 52-58). A facing material (46) is mated and bonded to the impervious film so as to “sandwich” the elastics as recited in claim 1 (column 5, lines 11-16). With regard to claim 2, the speed differential between the rotor body (6) and the impervious film (30) determines the amount of elongation or “stretching” of the elastic (column 7, lines 65-68). Van Vliet discloses clamps (8) that hold the elastic to the rotor body while shear blades (142) sever the elastic into individual elastic units (column 4, lines 44-46). With regard to claim 3, Van Vliet discloses the use of an adhesive applicator (28) to apply adhesive on

the elastic substance (column 4, lines 46-50). Van Vliet also discloses the method of applying adhesive to areas of the impervious sheet rather than the elastic (column 4, lines 64-66).

4. Claim 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimoe [US-2001/0025165].

Shimoe discloses a process for producing an article. In paragraph 0049, Shimoe discloses the supply of a backsheet (3). Shimoe also discloses the bonding of elastic members (9) to adhesive zones (B1, B2) on the backsheet (paragraph 0050). In paragraph 0054, Shimoe discloses the placement of side sheets (7). Figure 4, shows the placement of the side sheets so as to sandwich the elastic between the side sheets and the backsheet. Shimoe also discloses bonding the assembly with adhesive that is applied in various patterns to create multiple bonding points (paragraph 0059). With regard to claim 9, Shimoe discloses the placing of liquid-absorbent panels (4) on the backsheet (paragraph 0052).

5. Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gore [US-4239578].

Gore discloses a process for manufacturing articles as broadly recited in claims 10 and 11. Gore discloses the supply of a bottom cover sheet (12) and the bonding of elastic strips (16) to the bottom cover sheet (column 3, line 62 – column 4, line 2). Gore also discloses the placement and bonding of top cover sheet (11) to the bottom cover sheet by adhesive applied in a pattern, creating bonding points at multiple locations (column 3, lines 19 – 47). With regard to claim 9, Gore discloses the feeding of

absorbent pads (13) between the top cover sheet and bottom cover sheet, see Figures 1 and 2 (column 3, lines 6 – 18)

6. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Umebayashi [US-6554815].

Umebayashi discloses a method of producing an article as broadly recited in claim 12. Umebayashi (column 5, lines 6 - 56) discloses the method manufacturing an article by supplying two sheets (6,7), sheet 6 is the top sheet or “first web” as recited in claim 12, stretched elastic members (1) are bonded to sheet 6 at predetermined intervals by a hot melt adhesive. Umebayashi also discloses the use of cutting roller (21) to cut the elastic members at non-bonded areas, producing intervals of stretched elastic bonded between the sheets. Note that Umebayashi discloses in column 6, lines 29 – 42, that the above steps allow for better method of production then placing and securing elastic pieces cut into predetermined lengths or “stretched sheets” as recited in claim 12. Umebayashi also discloses the application of a back sheet (5) and the bondings of the back sheet by hot melt adhesive so that the elastic members are between sheet 6 and the back sheet, see Figure 2. The absorbent (4) is placed on the fit gather laminate (2) at positions corresponding to areas where there is no elastic bonded, as disclosed by Umebayashi. Figure 9 shows the placement of the absorbent between the adjacent elastic intervals.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1733

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Vliet in view of Frick [US-3629039].

Van Vliet discloses a process for producing an article as discussed in paragraph 3 above, including a second bonding step. Van Vliet does not disclose the use of an embossing or anvil roll. However, Van Vliet discloses the means for bonding the impervious sheet to the facing material can be found in the prior art (column 5, lines 11-17). Frick teaches the bonding of the cover sheet and backing sheet by embossing, heat sealing, or the like (column 1, lines 8-11). The use of embossing and anvil rolls to bond layers of an article was well known at the time of invention. It would have been obvious to one of ordinary skill in the art at the time of invention to include in Van Vliet's process the use of an embossing and anvil roll as taught by Frick in order to bond the cover sheet to the backing sheet.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otsubo et al. [US-2002/0129888] in view of Vander Wielen et al. [US-4720415].

Otsubo discloses in paragraph 0038, elastic members (64, 66, 73, 74) that are secured to a first web (61), the placement of a second web (70) and the joining of the two webs with the elastics sandwiched between, see Figure 5. Otsubo also discloses cutting the combined web into first web half (81) and second web half (82) and spacing the web halves away from each other (paragraph 0029). Otsubo discloses the placement of an absorbent pad member (84) so as to bridge the separated first and second web halves (paragraph 0030). Otsubo does not disclose bonding the first web, elastic members and second web together at a plurality of locations. Vander Wielen teaches a process for making a composite elastic material for disposable articles. Vander Wielen discloses bonding of two gatherable webs (16,20) sandwiching elastic web (4) between the outer webs at a plurality of spaced apart locations (column 2, line 67 – column 3, line 5). It would have been obvious to one of ordinary skill in the art at the time of invention to include in modify Otsubo's bonding step to include a plurality of spaced apart bonding locations as taught by Vander Wielen in order to make a composite web that is less likely to lose its elastic characteristics.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otsubo et al. in view of Vander Wielen et al. as applied to claim 6 above, and further in view of Heller et al. [US-202/0148557].

Otsubo, as modified, discloses a process for producing an article by bridging two spaced apart webs. Otsubo does not disclose trimming a leg hole. In paragraph 0067, Heller teaches a step of cutting a leg hole using a rotary die cutter. Heller discloses the removal of leg cut-outs (36) between the webs (26,28), see Figure 1A, segment "F1." It

would have been obvious at the time of invention to modify Otsubo's process to include the step of trimming a leg hole as taught by Heller in order to make a more comfortable crotch portion for the article.

Allowable Subject Matter

12. Claim 13 is allowed. The claim is allowed because of the restriction to place elastic sheets in an interval of a flow along the longitudinal centerline of the first web.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bradley et al. [US-4543141] discloses a method of making an article comprising the steps of supplying a first web, bonding elastics to the first web, placing an absorbent on and second web over the elastics and first web, and bonding the webs together.

Colton [US-4849049] discloses a method of bonding layers of an absorbent article together at a plurality of locations by applying adhesive in quasi-random patterns.


Leroy et al. [US-5100398] discloses an article with support webs that sandwich elastics between a back web and the support webs, on opposite edges of the back web.

Passafiume et al. [US-4409049] discloses a method of making an article comprising the steps of supplying a first web, bonding elastics to the first web, placing an absorbent on and second web over the elastics and first web, and bonding the webs together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel McNally whose telephone number is (571) 272-1409. The examiner can normally be reached on Monday - Friday 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-2685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel McNally
Examiner
Art Unit 1733

dpm

August 8, 2006



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